IN THE SPECIFICATION:

Please amend paragraph number **[0001]** as follows:

[0001] Cross-Reference to Related Applications: This application is a continuation of application Serial No. 09/820,999, filed March 29, 2001, ~~pending,~~ now U.S. Patent 6,518,650, issued February 11, 2003, which is a continuation of application Serial No. 09/537,134, filed March 29, 2000, now U.S. Patent 6,215,177, issued April 10, 2001, which is a continuation of application Serial No. 09/038,858, filed March 11, 1998, now U.S. Patent 6,091,133, issued on July 18, 2000, which is a continuation of application Serial No. 08/618,359, filed March 19, 1996, now U.S. Patent 5,729,049, issued March 17, 1998.

Please amend paragraph number **[0002]** as follows:

[0002] Field of the Invention: This invention relates generally to semiconductor integrated circuit (IC) ~~devices,~~ devices and, more specifically, to a method and apparatus for a semiconductor device utilizing a conventional-type lead frame with no die paddle and having a section of tape to support the semiconductor die.

Please amend paragraph number **[0006]** as follows:

[0006] The manufacturing advantages of having a paddleless, conventional-type lead frame have also been recognized in the art. For example, as illustrated in United States Patent 5,140,404 ("the '404 patent"), assigned to the assignee of the present invention, the die paddle is replaced with tape. The tape is attached to the ~~underside~~ undersides of the lead fingers and extends over the portion of the lead frame where the die paddle would normally be located. The tape serves at least two functions. First, it provides a platform to support the semiconductor die, and second, it stabilizes the ends of the lead fingers during the wire bonding operation. Moreover, because the tape is attached to one side of the lead frame, it provides substantially the same downset to lower the die relative to the top surface of the lead fingers. Thus, the semiconductor die is attached to and supported by the tape during wire bonding of the contacts of the die to the lead fingers.

Please amend paragraph number **[0007]** as follows:

[0007] However, rather than use thermosetting adhesives to attach the lead fingers of the lead frame to the tape and the semiconductor device, as in the process illustrated in the '404 patent, one or more thermoplastic layers are applied to a tape which is subsequently used to support the semiconductor device in a conventional-type lead frame having no semiconductor support paddle therewith. The lead fingers of the lead frame are bonded to the semiconductor device during the wire bonding operation. Use of one or more thermoplastic layers on a tape to support the semiconductor ~~device~~ device, as well as to lock the lead fingers of the lead frame in ~~place~~ place, is used in place of typical adhesives which require subsequent oven curing steps, such use of thermoplastic layers requires the substantially simultaneous bonding of both the semiconductor device and the lead fingers of the lead frame to the tape while the thermoplastic remains in its soft state. Furthermore, since the thermoplastic typically melts at 100 degrees Centigrade and the wire bonding of the lead fingers to the semiconductor device occurs when both are heated to approximately 250 degrees Centigrade, the thermoplastic may soften during the wire bonding process, thereby allowing the semiconductor device and/or lead fingers to move, causing bonding problems.

Please amend paragraph number **[0009]** as follows:

[0009] From the foregoing, while it has been recognized in the art to increase chip production efficiency while simultaneously decreasing the number of defective products, it is desirable to utilize a conventional-type lead frame without a die paddle and use tape to retain the chip in the lead ~~frame~~ frame, as well as to retain the lead fingers of the lead frame during wire bonding operations.

Please amend paragraph number **[0013]** as follows:

[0013] According to the present invention, a conventional-type, paddleless lead frame is ~~provided~~ provided, having at least one piece of tape extending to and between the lead fingers

where a die paddle would normally lie in a conventional-type lead frame. The tape is of a generally rectangular configuration, but may also be in the form of a circle, oval, parallelogram or any other shape that would fit within the footprint defined by the outside edge of packaging encapsulant. A semiconductor die is then attached to the tape between the proximal ends of the lead fingers using thermosetting types of adhesives. The lead fingers are also attached to the tape through the use of thermosetting types of adhesives.

Please amend paragraph number **[0031]** as follows:

[0031] Referring to FIG. 1, a semiconductor integrated circuit (IC) device 10 is shown including a portion of a conventional-type lead frame 12. Typically, the lead frame 12 is part of a lead frame strip comprised of a plurality of lead frames extending from broken edges 13 and 15 and are repeated about the slits 17. The lead frame 12 includes a plurality of lead fingers 18 that ~~extend~~ extends toward the center of the lead frame 12. Each of the lead fingers 18 includes a lead end 20 at a proximal end that is wire bonded to the semiconductor die 14 by wire bond 22. Typically, the lead ends 20 are plated to achieve a sufficient bond between the wire bond 22 and the lead end 20. The plated area is generally indicated by dashed line 24.

Please amend paragraph number **[0032]** as follows:

[0032] As should be recognized, the lead frame 12 does not include a die paddle for supporting the semiconductor die 14. Rather, the semiconductor die 14 is supported by tape 16. As better seen in FIG. 2, the tape 16 is attached to the bottom surface 26 of the lead frame 12 preferably using a thermosetting type of adhesive. When a semiconductor die 14 is subsequently attached to the tape 16, preferably using a thermosetting type of adhesive, the die 14 sits down inside the lead frame 12. In this manner, the length of a wire bond 22 between the die 14 and the lead finger 18 is decreased because the top surface 28 of the die 14 is positioned closer to the top surface 30 of the lead frame 12, as opposed to a die attached to the top surface of a lead frame having a die paddle that is not lowered. The preferred type of adhesive used to bond the lead fingers 18 of the lead frame 12 and the semiconductor die 14 to the tape 16 may be selected from

the group of epoxies, acrylics, silicones and polyamides, such adhesives being thermosetting, i.e., capable of irreversibly polymerizing and setting or hardening when heated to some appropriate temperature. Such adhesives are not a ~~thermoplastic;~~ thermoplastic, i.e., a material that can be repeatedly melted or softened by heat without a change of properties. When such adhesives are used to bond the lead fingers 18 of the lead frame 12 to the tape 16, since the adhesive must be cured, typically in an oven, it is necessary to bond the lead fingers 18 to the tape 16 before bonding the semiconductor die 14 to the tape 16. In this manner, the lead fingers 18 of the lead frame 12 are fixed or locked in position by the tape 16 with the semiconductor die 14 being subsequently locked in position on the tape 16 with respect to the lead fingers 18. While the lead fingers 18 may engage the tape 16 over any desired length thereof, the tape 16 preferably engages the lead fingers 18 over a length of at least 0.005 inches and may be in excess of 0.060 inches.